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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/563,154

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Yong Cheol Park

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EXAMINER

PENDLETON, DIONNE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/563,154	Applicant(s) PARK, YONG CHEOL	
	Examiner DIONNE H. PENDLETON	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-22 is/are pending in the application.
- 4a) Of the above claim(s) 2-8 and 10-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,9 and 18-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1, 9 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Takano (US 5,448,728)** in view of **Hwang (US 2005/0162989)** and **Kobayashi (US 2004/0042363)**.

Regarding claims 1 and 18,

Takano teaches a system for accessing a write-once read many storage medium comprising: a pickup (*inherent*), and controller (“11”, **figure 1**), and an overwrite method of an optical disc, comprising the steps of: that a recording mode applied to an optical disc is a sequential recording mode in which data is recorded sequentially onto sequential recording ranges allocated to a data area of the optical disc (**see F1,F2 in figure 2**), wherein each of the sequential recording ranges is one of an open sequential

recording range having a next writable area or a closed sequential recording range having no writable area (**see the discussion of non-writing state i.e., “open” sequential recording range in column 6, lines 17-23**); performing an overwrite for an overwrite-requested data onto a replacement recording area, wherein if the overwrite is requested in an open sequential recording range (**column 6:35-36 discloses overwrite data stored in an open area**), a next writable area within the open sequential recording range is identified as the replacement recording area (**column 5, line 36-column 6, line 10; column 6:52-55 and Figure 3; column 7:31-38 and Figure 6A**).

Takano fails to teach that a recording mode is confirmed by reading recording mode information recorded in a temporary management area of the optical disc.

Hwang teaches a method for recording data in a write-once storage medium. In paragraph **[0040]**, Hwang teaches a TDFL area which includes “state information”. Paragraph **[0053]** teaches that “state information” may include information which indicates whether or not the recording mode is sequential mode or random mode.

At the time of the invention, it would be obvious for one of ordinary skill in the art to modify the overwrite system of Takano per the teachings of Hwang such that one of at least two recording methods may be confirmed by reading “state information” from the storage medium, so as to enable the reproducing apparatus to reproduce data from the storage medium according to how data has been recorded thereon.

Takano fails to expressly teach that the controller performs the step of *confirming* whether a recording mode applied to the optical disc is a sequential recording mode.

Kobayashi teaches, in **paragraphs [0034], [0035] and [0036]**, a recording/reproduction apparatus wherein a method of recording to an optical storage medium may be specified. Kobayashi teaches that method selection is made prior to carrying out the recording operation, wherein one of a “normal” recording mode and a “data protecting” recording mode may be selected (the selection of the “normal” mode is interpreted as corresponding to “confirming whether a recording mode applied to the optical disc is a sequential recording mode”). Kobayashi further teaches that the normal recording mode is defined as sequentially recording data on an optical disc.

At the time of the invention, it would be obvious for one of ordinary skill in the art to further modify the overwrite system of Takano per the teachings of Kobayashi such that prior to performing an overwrite recording operation, one of at least two recording methods may be confirmed. Kobayashi teaches a choice between one of a “normal” sequential recording method and a “data protecting” recording method. By modifying the device of Takano, one could easily carry out the sequential recording method disclosed therein, or elect to “data protect” the recorded overwrite data, so that only the device which performs the recording operation may reproduce the recorded data.

Regarding claim 9,

Hwang teaches recording subsequent data in an open border area on a write-one storage medium in paragraph **[0084]**, i.e., performing an overwrite; paragraph **[0058]** teaches recording “recording zone entries” when data is recorded in the last open border area i.e., recording location information after performing an overwrite.

3. **Claims 19-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Takano (US 5,448,728)** in view of **Hwang (US 2005/0162989) *hereinafter* “Hwang’989”** and **Kobayashi (US 2004/0042363)** as applied to claims 1 and 18, and further in view of **Hwang (US 2004/0246852 A1) *hereinafter* “Hwang’852”**.

Regarding claim 19,

Takano modified by Hwang’989 and Kobayashi, fails to teach that location information of the overwrite-requested area and the replacement-recorded area is recorded as management information, after execution of the overwrite.

Hwang’852 teaches the apparatus of claim 18, wherein a controller is configured to control the pickup unit to write location information of the overwrite-requested area and the replacement-recorded area is recorded as management information, after execution of the overwrite **(see discussion of controller “520” in paragraph [0049] – [0058])**.

It would have been obvious for one of ordinary skill in the art at the time of the invention to further modify Takano, per the disclosure of Hwang’852, for the purpose of specifying the position of the overwrite area and replacement area during the initialization of the disc.

Regarding claims 20 and 21,

Hwang’852 teaches that the controller is configured to the pickup unit to write the location information in a temporary management area **(paragraph [0054] discloses the storage of TDFL and TDDS in the TDMA -temporary defect management area)**.

4. **Claim 22** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Takano (US 5,448,728)** in view of **Hwang (US 2004/0246852 A1) hereinafter “Hwang ‘852”** and **Hwang (US 2005/0162989) hereinafter “Hwang ‘989”**.

Regarding claim 22,

Takano teaches an optical disc comprising a data area configured to allocate one or more sequential recording ranges (**figure 2**) in a sequential recording mode in which data is recorded sequentially onto sequential recording ranges wherein each of the sequential recording ranges is one of an open sequential recording range having a next writable area and a closed sequential recording range having no writable area (**see the discussion of non-writing state i.e., “open” sequential recording range in column 6, lines 17-23**); wherein if the overwrite is requested in an open sequential recording range, a next writable area within the open sequential recording range is identified as the replacement recording area (**column 5, line 64 – column 6, line 10**).

Takano fails to expressly teach that location information of the overwrite-requested area and the replacement-recorded area is recorded in a temporary management area.

Hwang’852 teaches that location information may be recorded in a temporary management area (**paragraph [0054] discloses the storage of TDFL and TDDS in the TDMA -temporary defect management area**).

It would have been obvious for one of ordinary skill in the art at the time of the invention to alter Takano, per the disclosure of Hwang’852, for the purpose of specifying

the position of all distinct areas of the disc, including the overwrite area, at the initialization of the disc.

Takano fails to teach that recording mode information, including the sequential recording mode, is recorded in a temporary management area of the optical disc.

Hwang'989 teaches a method for recording data in a write-once storage medium. In **paragraph [0040]**, Hwang'989 teaches a TDFL area which includes "state information". **Paragraph [0053]** teaches that "state information" may include information which indicates whether or not the recording mode is sequential mode.

At the time of the invention, it would be obvious for one of ordinary skill in the art to modify the overwrite system of Takano per the teachings of Hwang'989 such that one of at least two recording methods may be confirmed by reading "state information" from the temporary management area of the storage medium, so as to enable the reproducing apparatus to reproduce data from the storage medium according to how data has been recorded thereon.

Response to Arguments

5. Applicant's arguments with respect to claims rejected in the official action mailed 09/09/2010 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIONNE H. PENDLETON whose telephone number is (571)272-7497. The examiner can normally be reached on 10:30-7:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dionne H Pendleton/
Examiner, Art Unit 2627

/Wayne Young/
Supervisory Patent Examiner, Art Unit 2627